

**Laura S. Olton**  
General Counsel  
Rhode Island

January 24, 2007

**VIA HAND DELIVERY & ELECTRONIC MAIL**

Luly E. Massaro, Commission Clerk  
Rhode Island Public Utilities Commission  
89 Jefferson Boulevard  
Warwick, RI 02888

**RE: Docket 3628 – The Narragansett Electric Company’s Service Quality Plan  
Feeder Ranking Report – 4th Quarter 2006**

Dear Ms. Massaro:

Enclosed please find ten (10) copies of the Feeder Ranking Report for the fourth quarter of 2006, filed in accordance with the Additional Reporting Criteria, Item 1, of The Narragansett Electric Company, d/b/a National Grid Service Quality Plan effective January 1, 2005.

Thank you for your attention to this filing. Please feel free to contact me if you have any questions at (401) 784-7667.

Very truly yours,



Laura S. Olton

Enclosures

cc: Docket 3628 Service List  
Paul Roberti, Esq.  
Steve Scialabba, Division

**Feeder Ranking By Quarter (Q-4)**  
**The Narragansett Electric Company**  
**October 2006 - December 2006**

Rank	Feeder	Frequency	Town Served	Customers	Events	Duration	CMI	Cause	Corrective Action
1	12J6	3	PROVIDENCE	29	2	124	3596	Feeder Lockout - Tree Growth	Closed Feeder Breaker
								Feeder Lockout - Tree Growth	Closed Feeder Breaker
2	32J12	2.7894	NEWPORT	489	2	220.69	107918	Loss of 23kV Supply - Cable Dig In	Repaired Cable and restored circuit to normal operation.
								Feeder Lockout - Tree Limb	Removed tree limb and restored circuit to normal operation
3	17W43	2.2877	WOONSOCKET	1015	1	119.11	120892	Feeder Lockout - Motor Vehicle Accident	Made repairs to primary phase conductors and restored circuit to normal operation.
4	16J3	1.9254	NORTH SMITHFIELD	536	2	94.39	50595	Forced Outage for Emergency Repairs	Made permanent repairs following the motor vehicle accident mentioned below.
			WESTERLY					Feeder Lockout - Motor Vehicle Accident	Made temporary taps to adjacent feeders to restore service and allow for repairs.
5	122J2	1.7689	MIDDLETOWN	740	3	70.86	52435	Transformer fuse link failure - broken tap	Repaired tap and refused transformer cutout
			NEWPORT					Forced Outage - Tree Limb	Switching was performed to allow for repairs following a downed tree limb. Following repairs, the circuit was returned to normal operation.
								Loss of 23kV Supply - Cable Dig In	Repaired Cable and restored circuit to normal operation.
6	3F2	1.7152	WARWICK	2714	4	34	92274	Forced Outage - Insulator Failure	Switching was performed to allow for repairs to a failed loadbreak switch insulator. Following repairs, the circuit was restored to normal operation.
								Feeder Lockout - Damage to feeder breaker caused by a squirrel	Switching was performed to restore load and isolate damaged circuit breaker. The breaker was replaced, and the circuit was returned to normal operation.
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced line fuse.
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced line fuse.
7	54F1	1.3672	COVENTRY	3042	18	114.95	349671	Fuse Link Failure - Tree Limb	Removed tree limb and replaced line fuse.
			SCITUATE					Fuse Link Failure - Insulator Failure	Replaced insulator and replaced line fuse
								Fuse Link Failure - Unknown Cause	Replaced line fuse
								Fuse Link Failure- Equipment Failure	Replaced failed equipment and replaced transformer fuse
								Fuse Link Failure - Deterioration	Replaced transformer fuse
								Forced Outage - Equipment Failure	Replaced failed equipment and replaced line fuse
								Fuse Link Failure - Animal	Replaced transformer fuse
								Fuse Link Failure - Tree Limb	Removed tree and replaced line fuses
								Fuse Link Failure - Tree	Removed limb and replaced line fuse
								Fuse Link Failure - Equipment Failure	Removed failed equipment and replaced line fuse.
								Fuse Link Failure - Animal	Replaced transformer fuse
								Fuse Link Failure - Equipment Failure	Replaced failed equipment and replaced line fuse
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced line fuses
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced line fuses
								Feeder Lockout - Tree Limb	Removed tree limb and restored circuit to normal operation
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced line fuses
								Fuse Link Failure - Animal	Replaced line fuse
								Forced Outage - Motor Vehicle Accident	Made repairs to primary phase conductors and restored circuit to normal operation.
8	59F1	1.3494	SOUTH KINGSTOWN	1946	14	40.92	79630	Link Failure - Lightning	Replaced line fuse
			NARRAGANSETT					Fuse Link Failure - Equipment Failure	Replaced failed equipment and replaced line fuse
			EXETER					Fuse Link Failure - Unknown Cause	Replaced Line fuse
			NORTH KINGSTOWN					Fuse Link Failure - Deterioration	Replaced line fuse
								Loss of 34kV supply - structure damage	Manually switched to an alternate supply to restore load and made repairs.
								Fuse Link Failure - Tree	Removed tree and replaced line fuses
								Fuse Link Failure - Equipment Failure	Replaced failed equipment and replaced transformer fuse
								Fuse Link Failure - Tree Limb	Removed limb and replaced line fuse
								Fuse Link Failure - Tree	Removed tree, replaced pole and replace transformer fuse
								Fuse Link Failure - Animal	Replaced transformer fuse
								Fuse Link Failure - Equipment Failure	Replaced failed equipment and replaced line fuse
								Fuse Link Failure - Tree Limb	Removed limb and replaced line fuse
								Planned outage - replace equipment	Replaced equipment and replaced transformer fuse
								Fuse Link Failure - Tree	Removed tree and replaced line fuse
9	5F1	1.342	BARRINGTON	2427	12	256.53	622594	Fuse Link Failure - Animal	Replaced line fuse
			WARREN					Forced feeder outage - tree limb	Removed tree limb and restored circuit to normal operation

**Feeder Ranking By Quarter (Q-4)**  
**The Narragansett Electric Company**  
**October 2006 - December 2006**

Rank	Feeder	Frequency	Town Served	Customers	Events	Duration	CMI	Cause	Corrective Action
								Fuse Link Failure - Unknown Cause	Replaced transformer fuse
								Fuse Link Failure - Unknown Cause	Replaced Line fuse
								Fuse Link Failure - Animal	Replaced transformer fuse
								Fuse Link Failure - Tree Limb	Removed limb and replaced transformer fuse
								Fuse Link Failure - Animal	Replaced transformer fuse
								Planned Outage - Equipment Maintenance	Restored circuit to normal operation following maintenance
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced line fuse
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced line fuse
								Fuse Link Failure - Animal	Replaced line fuse
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced line fuse
10	34F3	1.3056	GLOCESTER FOSTER SCITUATE	1106	15	99.68	110245	Fuse Link Failure - Tree Limb	Removed tree limb and replaced line fuse
								Fuse Link Failure - Tree	Removed tree and replaced line fuse
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced line fuse
								Fuse Link Failure - Equipment Damage - Wind	Repaired damaged equipment and replaced line fuse
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced line fuse
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced line fuse
								Fuse Link Failure - Animal	Replaced line fuse
								Planned Outage - Equipment Maintenance	Restored circuit to normal operation following maintenance
								Fuse Link Failure - Equipment Failure	Replaced failed equipment and replaced Transformer fuse
								Planned Outage - Equipment Maintenance	Restored circuit to normal operation following maintenance
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced line fuse
								Planned Outage - Equipment Maintenance	Restored circuit to normal operation following maintenance
								Fuse Link Failure - Equipment Failure	Replaced failed equipment and replaced Transformer fuse
								Feeder Lockout - Equipment Damage	Repaired damaged equipment and restored circuit to normal operation
								Fuse Link Failure - Unknown Cause	Replaced Line fuse
11	59F2	1.214	SOUTH KINGSTOWN	2341	7	89.32	209088	Forced Outage - Tree Limb	Removed tree limb and restored circuit to normal operation
								Forced Outage - Tree Limb	Removed tree limb and restored circuit to normal operation
								Fuse Link Failure - Animal	Replaced transformer fuse
								Forced Outage - Equipment Damage	Replaced damaged equipment and restored circuit to normal operation
								Fuse Link Failure - Equipment Failure	Replaced failed equipment and replaced line fuse
								Fuse Link Failure - Unknown Cause	Replaced transformer fuse
								Fuse Link Failure - Equipment Failure	Replaced failed equipment and replaced transformer fuse
12	102W54	1.2028	CUMBERLAND	2180	11	41.45	90367	Fuse Link Failure - Animal	Replaced transformer fuse
								Fuse Link Failure - Equipment Failure	Replaced failed equipment and replaced transformer fuse
								Fuse Link Failure - Deterioration	Replaced transformer fuse
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced transformer fuse
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced transformer fuse
								Fuse Link Failure - Equipment Failure	Replaced failed equipment and replaced transformer fuse
								Fuse Link Failure - Animal	Replaced Line fuse
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced transformer fuse
								Fuse Link Failure - Animal	Replaced transformer fuse
								Fuse Link Failure - Animal	Replaced transformer fuse
13	127W40	1.1845	NORTH SMITHFIELD BURRILLVILLE	2509	6	59.17	148452	Feeder Lockout - Unknown	Feeder patrolled - no cause found - restored circuit to normal operation
								Fuse Link Failure - Animal	Replaced Line fuse
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced transformer fuse
								Recloser Lockout - Equipment Failure	Replaced failed equipment and restored circuit to normal operation
								Fuse Link Failure - Animal	Replaced transformer fuse
14	6J3	1.1667	PROVIDENCE	24	1	93.33	2240	Fuse Link Failure - Cable Dig In	Repaired damaged cable and replaced transformer fuse
								Fuse Link Failure - Animal	Replaced transformer fuse
								Feeder Lockout - Motor Vehicle Accident	Repaired damaged equipment and restored circuit to normal operation
15	12J3	1.1349	PROVIDENCE	289	1	162.3	46904	Planned Outage - Voltage Conversion	Restored circuit to normal operation following conversion
16	20F2	1.1321	EAST PROVIDENCE	1968	4	67.58	132993	Fuse Link Failure - Motor Vehicle Accident	Repaired damaged equipment and restored circuit to normal operation

**Feeder Ranking By Quarter (Q-4)**  
**The Narragansett Electric Company**  
**October 2006 - December 2006**

Rank	Feeder	Frequency	Town Served	Customers	Events	Duration	CMI	Cause	Corrective Action
								Feeder Lockout - Tree Limb	Removed limb and restored circuit to normal operation
								Fuse Link Failure - Animal	Replaced Line fuse
								Planned Outage - Equipment Maintenance	Restored circuit to normal operation following maintenance
17	21J2	1.1318	MIDDLETOWN	311	4	48.32	15029	Fuse Link Failure - Tree Limb	Removed tree limb and replaced transformer fuse
								Fuse Link Failure - Tree Limb	Removed tree limb and replaced line fuse
								Loss of 23kV Supply - Cable Dig In	Repaired Cable and restored circuit to normal operation.
								Fuse Link Failure - Tree Growth	Cleared tree growth and replaced transformer fuse
18	51J2	1.1146	NEWPORT	724	2	30.36	21983	Forced Outage - Tree Limb	Repaired damage caused by tree limb and restored circuit to normal operation
								Forced Outage - Equipment Damage	Repaired damage and restored circuit to normal operation

The Total No. of cust's Served will vary throughout the year due to new activations, terminations of service or rearrangements of the company's distribution system.

**DURATION** = (Total CMI) / (Total no. of cust's served by feeder)

**FREQUENCY** = (Total no. of cust's interrupted) / (Total no. of cust's served by feeder)

**TOTAL CUSTOMER MINUTES (CMI)** = Sum of [((number of customers interrupted) x ( duration of interruption))] for each event]

### Certificate of Service

I hereby certify that a copy of the cover letter and / or any materials accompanying this certificate has been mailed or hand-delivered to the individuals listed below.



\_\_\_\_\_  
Joanne M. Scanlon

January 24, 2007

Date

### **Narragansett Electric Company – Service Quality Plan Docket 3628 - Service List**

<b>Name</b>	<b>E-mail Distribution List</b>	<b>Phone/FAX</b>
Laura Olton, Esq. National Grid 280 Melrose Street Providence RI 02907-1438	<a href="mailto:Laura.olton@us.ngrid.com">Laura.olton@us.ngrid.com</a>	401-784-7667
	<a href="mailto:Joanne.scanlon@us.ngrid.com">Joanne.scanlon@us.ngrid.com</a>	401-784-4321
Leo Wold, Esq. Dept. of Attorney General 150 South Main St. Providence RI 02903	<a href="mailto:Proberti@riag.state.ri.us">Proberti@riag.state.ri.us</a>	401-222-2424
	<a href="mailto:Steve.scialabba@ripuc.state.ri.us">Steve.scialabba@ripuc.state.ri.us</a>	ext. 2299
	<a href="mailto:David.stearns@ripuc.state.ri.us">David.stearns@ripuc.state.ri.us</a>	401-222-3016
	<a href="mailto:Al.contente@ripuc.state.ri.us">Al.contente@ripuc.state.ri.us</a>	
John Stutz Tellus Institute 11 Arlington St. Boston MA 02116-3411	<a href="mailto:Jstutz@tellus.org">Jstutz@tellus.org</a>	
W. Mark Russo, Esq.	<a href="mailto:mrusso@frlawri.com">mrusso@frlawri.com</a>	
<b>Original &amp; nine (9) copies file w/:</b> Luly E. Massaro, Commission Clerk Public Utilities Commission 89 Jefferson Boulevard Warwick RI 02888	<a href="mailto:Lmassaro@puc.state.ri.us">Lmassaro@puc.state.ri.us</a>	401-941-4500
	<a href="mailto:Sfrias@puc.state.ri.us">Sfrias@puc.state.ri.us</a>	
	<a href="mailto:Tmassaro@puc.state.ri.us">Tmassaro@puc.state.ri.us</a>	
W. Mark Russo, Esq.	<a href="mailto:mrusso@frlawri.com">mrusso@frlawri.com</a>	